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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,091	03/23/2004	Darryl A. Bourgoyne	H055010.0035US1	3844

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EXAMINER

DANG, HOANG C

ART UNIT PAPER NUMBER

3672

MAIL DATE DELIVERY MODE

07/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/807,091	<b>Applicant(s)</b> BOURGOYNE, DARRYL	
	<b>Examiner</b> Hoang Dang	<b>Art Unit</b> 3672	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 April 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 43,44,46,48-54, 56-61, 64-68, 70-78, 88-90, 92-100 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 43,44,48-54,56-61,64-68,70-78 and 88 is/are allowed.
- 6) ☒ Claim(s) 46,89,90 and 92-98 is/are rejected.
- 7) ☒ Claim(s) 99 and 100 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____  |

Continuation of Attachment(s) 3. Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :7/10/2007; 4/23/2007; 1/12/2007.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claim 90 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison (US 3,638,721) (see figure 3) or Williams et al (US 5,662,181) (see figure 3) in view of Knox (US 2,609,836) or Watkins (US 3,603,409) or Jones (US 3,443,643).

Either Harrison or Williams et al discloses the invention as claimed except for the valve in fluid communication with the housing opening. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide either Harrison or Williams et al with a valve as claimed in view of the teaching of Knox, Watkins or Jones so that the pressure or/and flow rated can be effectively controlled when desired.

3. Claims 89 and 92-98 are rejected under 35 U.S.C. 103(a) as being unpatentable over the April 1998 Offshore Drilling with Light Weight Fluids Joint Industry Project Presentation (reference II on PTO-1449 filed 5/7/2004) (herein after "Reference II) in view of Harrison (US 3,638,721) or vice versa.

Reference II discloses a method of drilling an offshore well with lightweight fluids. On page C-9, it discloses the use of a rotating head at the top of a riser without telescopic joint. Reference II does not disclose the structure of the rotating head. Harrison '721 discloses a method and apparatus for drilling an offshore well from a floating vessel as that of Reference II. However, Harrison teaches using a rotating head 22 including a housing 42 that rotatably supports a removable seal member 40 and has an opening 60 for returning drilling fluid to the

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floating vessel through a flexible pipe 35. The rotatable seal member 40 is movable with an inner member 41 to sealably engage a rotatable drill string. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use of a rotating head having a structure as claimed in the Reference II in view of the teaching of Harrison.

Alternatively, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a riser in Harrison and locate the rotating head 22 above the riser as claimed in view of the teaching of Reference II.

With respect to claims 89 and 92, the “inner member”, “radially outwardly disposed outer member”, “bearings”, “seal” and “housing” as recited do not distinguish from elements (41), (43), (44a), (40) and (42) respectively of the rotating control head of Harrison. It is noted that the uppermost portion of bearing element 41 is located radially inward of the radially outer portion of retainer plate 43.

As further for claims 89 and 92, contrary to applicant’s argument, none of the bearings 44a which are in contact with the inner members 41 are in contact with the housing 42 as recited.

As for claims 93-94, contrary to applicants’ argument, the flexible pipe 35 of Harrison is considered as “means for moving the drilling fluid from the riser adjacent a first level of the floating structure to a second level of the floating structure above the first level” as claimed. The “first level” is the level where the flexible pipe is connected to the riser” and the “second level” is the level of a container on the floor of the floating structure into which the drilling mud returns.

As for claims 95-98, in response to applicant's argument based upon the age of the references, contentions that the reference patents are old are not impressive absent a showing that

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the art tried and failed to solve the same problem notwithstanding its presumed knowledge of the references. See *In re Wright*, 569 F.2d 1124, 193 USPQ 332 (CCPA 1977).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

4. Claim 46, 89, 92 and 98 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reference II in view of Williams et al (US 5,662,181) or Murray et al (US 4,175,186).

Reference II discloses a method of drilling an offshore well with lightweight fluids. On page C-9, it discloses the use of a rotating head at the top of a riser without telescopic joint. Reference II does not disclose the structure of the rotating head. However, either Williams et al '181 (see figure 3) or Murray et al '186 (see figures 1-7) disclose a rotating head including a housing that rotatably supports a removable assembly that includes an inner member, a radially outwardly disposed outer member, a plurality of bearings interposed between the inner and outer members in order to facilitate removably mounting the bearing assembly in the housing while drilling or servicing the well (column 2, lines 36-42 in Williams et al or column 6, lines 1-4 in Murray et al). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use of a rotating head having a structure as claimed in the Reference II in view of the teaching of Williams et al for the advantages pointed out above.

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Contrary to applicant's argument, the assembly of Reference II as modified by Williams et al or Murray et al inherently "manages pressure on the drilling fluid" when the seal in their rotating blowout preventer sealingly engages the drill string while the drill string rotates during the course of drilling a borehole.

***Allowable Subject Matter***

5. Claims 43, 44, 48-54, 56-61, 64-68, 70-78 and 88 are allowed.
6. Claims 99 and 100 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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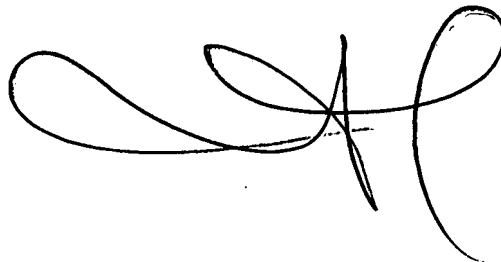
however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang Dang whose telephone number is 571-272-7028. The examiner can normally be reached on 9:15-5:45 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hoang Dang  
Primary Examiner  
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A handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke, positioned below the printed name and title of the examiner.